

Amendments to Specification

Please amend paragraph [0036] as follows:

[0064] The outer nosecone 18 may be optimized for low-altitude flight, such as during the ascent through the relatively thick atmosphere close to the ground. Thus, the outer nosecone 18 may have a streamlined shape, for example, having a relatively sharp tip 56, and having a shape with a relatively small angle 58 in a conical portion 60 that is aft of the tip 56. The outer nosecone 18 thereby may have a lower coefficient of drag than the inner nosecone 20. In one embodiment, the tip 56 may be a hemispherical tip blunted to a radius of 3.6 inches (9.2 cm). The tip 56 may be blunted so as to move the stagnation point during hypersonic ascent, forward of the payload assembly 16. The outer nosecone angle 58 may be about 7 degrees. More broadly, the outer nosecone angle 58 may be between about 5 and about 10 degrees. Even more broadly, the outer nosecone angle 58 may be less than a corresponding inner nosecone angle 64 of the inner nosecone 20. Similarly, the outer nosecone tip 56 may be sharper than a corresponding inner nosecone tip 66 of the inner nosecone 20. Thus, the inner nosecone 20 ~~48~~ may have a blunter shape, for example, with the inner tip 66 having a radius of about 6 inches (15 cm), and the inner nosecone angle 64 being about 40 degrees, or more broadly between about 30 and about 50 degrees.

Please amend paragraph [0064] as follows:

[0064] In step 122, the second stage 14 separates from the payload assembly 16, ~~44~~, and in step 124 the rocket motor 30 of the payload assembly 16 ignites. In step 126, the payload assembly 16 coasts. The burn in step 124 and the coasting in step 126 may be intermittent events, with, for example, the burn occurring for two to ten seconds, followed by a period of coasting. During both the steps 124 and 126 the

attitude control system 32 may be guiding the payload assembly 16 towards its intended target.